10. REFERENCE AND BIBLIOGRAPHIC STYLE

10.1 Reference Style

Nearly all scientific work is, to some degree, a growth of preceding work in the same or related fields. In reporting his/her work, every author has the responsibility to identify the sources that led to the development of the current project being reported. This documentation fulfills an author's obligation to give credit where credit is due. Because these sources or references play an important part in putting the work in perspective, the author must make the references accurate and complete, so that the reader who wishes to examine the references further may easily identify and access them. This section provides guidelines, instruction, and examples for uniformly citing references and compiling reference lists, bibliographies, and annotated bibliographies.

Documents cited in the text appear in a numbered list in a section called "REFERENCES." Bibliographic entries (documents not cited in the text or in the appendices but listed as supplementary information) should be listed in a separate section called "BIBLIOGRAPHY."

This handbook does not attempt to provide detailed instructions for every type of reference material. Guidelines and examples are presented for scientific reference style, and a few examples of standard legal style are given. Guidelines for style of referencing humanities literature are found in the *Chicago Manual of Style*.

The reference style for the more common types of scientific literature is illustrated in this section, and a general rule of referencing is given. This style is based on the IEEE style and is used by NTIA/ITS. Some NTIA offices, such as OSM and OPAD, do not typically use this style.

Authors should consider the following guidelines when citing references in NTIA publications:

*   Each item listed in the reference section must be available to the general public and in the open literature.

*   Technical Memoranda produced before FY 2003 may be included only if they have been deposited with NTIS, which signifies that they are available in the open literature and available to all interested parties. All Technical Memoranda produced after October 2002 can be referenced.

*   Classified documents may not be listed, even if the title is unclassified. However, a classified document may include in its reference list or bibliography the title, author, and other identifiers of another classified document with equal or lower security classification.

10.2 Citations Within the Text

Documents cited in NTIA publications should be available to anyone. It is sometimes necessary, however, to cite oral information, information from websites, or documents that are not available in the open literature. This nonreferenceable information may be shown in the text, but may not be included in the reference list. (See Section 10.2.2 for further details.)

10.2.1 Open-literature Citations

References are listed in the text with a number in square brackets. Numbers are assigned to reference items in numerical sequence, beginning with [1] for the first citation. Examples follow for the various ways references may be shown in the text:

> When a reference is inserted in the text, include only the reference number in square brackets: "...[4]..."

> Authors' names may be included if they are relevant to the text: "...in a paper by Hoffmeyer [4]..." It is almost never useful to give dates of references in text.

> When citing more than one reference, present them in numerical order, separated by commas, each within its own set of brackets. A consecutive series of reference numbers may be indicated with a dash between the first and last: "...[1]–[4], [6], [21]..."

> When using illustrations from other sources, always include the reference within the caption: "Figure 1.2... [4]..."

NTIA Reports that have been sent to a printer are considered open literature because they have been assigned numbers and publication dates and will be available by the time the document referencing them is also available.

Reports produced by NTIA/OSM and NTIA/OPAD, particularly those having a less technical emphasis, often use footnotes to add parenthetical material. In these cases, the author may cite references in the footnotes instead of in square brackets. The list of references is then omitted.

10.2.2 Other Citations

The source of material obtained from personal contact, websites, or documents not in the open literature may be cited in the text, with details given in a footnote. The NTIA author is free to discuss the substance of the documents, provided it is clear that the documents are not readily available. Such unavailable literature is not included in the reference list. Examples of ways to discuss items not in the open literature follow:

- Private communications may be mentioned in the text with a phrase such as "...the results reported by Cole (private communication)..."

- Unpublished work may be described in the text using a phrase such as "...the work by Adams (unpublished) supports..."

- A paper under consideration for publication by a trade or professional journal could be cited as follows: "Kissick (1997, submitted for publication) discussed this theory..."

- A web document could be cited as follows: "Burka[1] argues that..." accompanied by this footnote:

> [1]L.P. Burka, "A hypertext history of multi-user documents," *The MUDdex*, 1993. http://www.apocalypse.org/pub/u/lpb/muddex/essay/, accessed on Dec. 5, 1994. (Note that much of this information is often unavailable for web documents; NTIA authors should include whatever is available.)

The NTIA Technical Memorandum publication series have traditionally not been included in the reference list since they have not been made widely available. However, beginning in FY 2003, Technical Memoranda will be deposited with NTIS and considered part of the open literature, and should be treated as such in references. Authors may mention older, non-open-literature, Technical Memoranda in the body of a paper either within parentheses or in the text discussion, using the words "limited distribution" as shown in the following examples:

• "Earlier investigations of this type were conducted by J.A. Hoffmeyer and L.E. Pratt (NTIA Technical Memorandum 87-120, limited distribution)."

• "Discussions of this approach are found in an NTIA Technical Memorandum of limited distribution, NTIA-TM-87-120, by J.A. Hoffmeyer and L.E. Pratt."

10.3 Entries Within the Reference List

At the end of the text, list all references by number (in brackets) in the order of their citation in the text, *not* in alphabetical order. List only one reference per reference number. Single space each reference with a double space between entries. (See examples in the following subsections.)

If the source for a cited document is NTIS, the NTIS order number and NTIS address should be given in parentheses following the page number. (The NTIS address is 5285 Port Royal Road, Springfield, VA 22161.) If the source for a cited document is GPO, the 12-digit GPO order number and GPO address should be given in parentheses following the page number. (The GPO address is: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.) It is not necessary to repeat these addresses more than once in the reference list.

When citing publications in a foreign language, always give the untranslated title (unless the alphabet characters are not available on standard word-processing systems); however, the translated or Romanized title may follow the original title (in parentheses).

In a multivolume report, each volume contains a reference list for that volume only. Inclusion of a reference list for the entire set is at the author's discretion.

References in appendices are listed in a reference section for each appendix and are not included in the reference section for the body of the paper, unless those publications are cited both in the appendix and in the main body of the paper, or unless the appendix is exceptionally small.

There is no established procedure for referencing materials of a nonstandard nature, e.g., seven-volume sets (or multivolume series) with different authors for each volume, series that change names in the middle of the run, etc. In those cases, the general rule is to **give the reader complete information in a manner consistent with the other references in the report and in a manner that will enable the reader to find the reference cited and to access the document**.

Details of referencing style in both the main body of text and the appendices are left to the discretion of the author. In any manuscript, the main idea in referencing style is consistency throughout the report. Authors are invited to consult with the publication officer for advice on any aspect of referencing.

10.3.1 Corporate Author Citations

All Corporate Author entries — those entries published by a firm or an agency and without any individual author names — are to be listed in the reference list in a consistent manner. For example, all National Institute of Standards and Technology documents must be cited the same way in any given paper. Likewise, each time a particular technical journal is cited, its title should be written in the same way, even though different articles in the journal may be cited. For example, *IEEE Transactions on Electromagnetic Compatibility* may be spelled out in full or abbreviated in various ways, such as *IEEE Trans. Electromag. Compat.*, and *IEEE Trans. EMC*, but within a given reference list, only one of these styles should be used.

10.3.2 Examples of Reference List Style

The following examples include various materials that an author will encounter when preparing a reference list. These examples show the correct reference style for listing reports, periodicals, books, articles and chapters in a book, proceedings of conferences, and legal citations in a reference list.

Reports

[1]   A. Farrar, "Calculations of power flux density levels in the 2-GHz band, Phase Three," NTIA Report 86-199, Jul. 1986 (NTIS Order No. PB 87-120523/AS).

[2]   W.A. Kissick, L.T. Jones, and W.J. Hartman, "The performance of amplitude companded sideband — Interim Report: A review and measurement plan," National Bureau of Standards Report GCR-86-511, Apr. 1986 (NTIS Order No. PB 86-196391/AS).

Periodicals

[3]   J.E. Farrow and R.E. Skerjanec, "Transmission monitoring and control of strategic communication systems," *IEEE J. Selected Areas Commun.*, vol. 4, no. 2, pp. 308-312, Mar. 1986.

[4]   M.J. Miles and N.B. Seitz, "Testing network performance: A statistical analysis," *Data Comm.*, Jun. 1986.

Books

[5]   J. Martin and A.R.D. Norman, *The Computerized Society*, Englewood Cliffs, NJ: Prentice-Hall, Inc., 1970, pp. 97-103.

[6]   H. Jasik, Ed., *Antenna Engineering Handbook*, New York: McGraw-Hill Book Co., 1961.

Articles and Chapters in Books

[7]   J.R. Wait, "Electromagnetic surface waves," in *Advances in Radio Research*, J.A. Saxton, Ed., London: Academic Press, 1964, pp. 157-217.

[8]   F. Forstmann, "Electron states at clean surfaces," Ch. 8 of *Photoemission and the Electronic Properties of Surfaces*, B. Feuerbacher, B. Bitton, and R.F. Willis, Eds. New York: Wiley, 1979, pp. 193-226.

Articles in Proceedings of Conferences and Symposia

[9]   A.D. Spaulding, "Locally optimum and suboptimum detector performance in non-Gaussian "broadband" and "narrowband" interference environments," in *Proc. 6th Symposium and Technical Exhibition on Electromagnetic Compatibility*, Zurich, Switzerland, 1985, pp. 437-442.

[10]   J.J. Lemmon, "Wideband HF noise and interference modeling," in *Proc. IEEE Military Communications Conference (MILCOM '89)*, vol. 3, Oct. 1989, pp. 48.4.1-48.4.6.

If several references cite papers from the same meeting, the meeting title may be abbreviated after spelling it out and showing the abbreviation the first time it appears. For example, "IEEE Military Communications Conference (MILCOM '89)" could be shown in subsequent references as "MILCOM '89."

Reference Style for Legal Citations

The reference style for legal citations follows the convention specified in style manuals for lawyers, such as the Harvard Law Review Association's Uniform System of Citation (1986), 14th ed., commonly called "The Blue Book." The accepted style for referencing court cases is

   Willis v. Thomas, 600 F.2d 1079, 1083 (D.C. Cir. 1979)

Here, "*Willis v. Thomas*," is the name of the court case, "600" is the volume number, "F.2d" refers to the official reporter (*Federal Reporter*, second series), the number 1079 refers to the page on which the case begins, and 1083 is the page on which the actual citation or referenced material is found. For all cases other than U.S. Supreme Court cases, the court and year follow the case citation in parentheses. For Supreme Court cases, only the year follows in parentheses.

10.4 Content of the Bibliography

The bibliography lists publications (available to all) pertinent to the subject of the report but not cited in the report. Typically, authors do not include cited documents in the bibliography (and do not include documents in the reference section that are not cited in the text).

The same format and style rules apply to the bibliography section as apply to the reference list, except that bibliography entries are arranged in alphabetical order, by author. The bibliography section immediately follows the reference section. The bibliography, like the list of references, may contain only documents that are available to the general public. Classified documents may

not be listed in the reference list or bibliography of an unclassified paper, even if the referenced title is unclassified. However, the bibliography of a classified paper may include in its reference list or bibliography another classified document with equal or lower security classification.

Authors who wish to combine lists of references with lists of bibliographic material are advised to preserve stylistic consistency and obey stylistic rules that promote completeness and clarity in each entry. A combined list of references and bibliography must be in alphabetical order and may *not* be titled "REFERENCES" because not all items in the list are referred to in the text. A separate reference list, in numerical order, must always be included as well.

10.5 Annotated Bibliographies

Annotated bibliographies are lists of bibliographic materials with brief summaries added (usually, but not always, by the compiler). The style for citation of the materials in an annotated bibliography published by NTIA is the same as that for citations of references in other NTIA publications. (See Section 10.2.2.) Below are examples of typical entries in an annotated bibliography:

H. Akima, "A model of a shaped-beam emission pattern of a satellite antenna for interference analysis," NTIA Report 86-197, Jul. 1986 (NTIS Order No. PB 86-238755/AS). For efficient use of the geostationary satellite orbit, mutual interference among satellite systems must be analyzed in the planning stage of the systems. To conserve the transmitter power, many satellite antennas in the FSS (fixed-satellite service) use the so-called shaped-beam emission patterns that cover their service areas. A computer model of a shaped-beam pattern is needed in the analysis of mutual interference. The author presents a simple model for calculating the antenna gain in the direction of an Earth point from several contour lines given on the map of the Earth, each corresponding to an antenna gain value.

C. Rush, M. Fox, D. Bilitza, K. David, L. McNamara, F. Stewart, and M. PoKempner, "Ionospheric mapping: An update of foF2 coefficients," *Telecommun. Journal*, vol. 56, no. III, pp. 179-182, 1989. A new set of coefficients to map numerically the global variation of foF2 has been developed by a Working Group under the auspices of the International Union of Radio Science. This article describes how these new maps were obtained, and presents the results of tests to determine the extent to which they are an improvement above the current International Radio Consultative Committee (CCIR) maps.